CURRENT LISTING OF CLAIMS

1. (Original) An isolated peptide or peptidomimetic, comprising the amino acid sequence CREKA (SEQ ID NO: 1) or a peptidomimetic thereof, said peptide or peptidomimetic having a length of less than 100 residues.

2. (Original) The isolated peptide or peptidomimetic of claim 1, which has a length of less than 50 residues.

3. (Original) The isolated peptide or peptidomimetic of claim 1, which has a length of less than 20 residues.

4. (Original) The isolated peptide or peptidomimetic of claim 1, 2 or 3, which is a peptide.

5. (Original) A conjugate, comprising a therapeutic agent linked to a homing molecule that selectively homes to tumor vasculature, said homing molecule selectively binding collagen.

6. (Original) The conjugate of claim 5, wherein said homing molecule selectively binds non-helical collagen.

7. (Original) The conjugate of claim 5, wherein said homing molecule selectively homes to breast tumor vasculature.

8. (Original) The conjugate of claim 5, wherein said homing molecule selectively binds collagen IV.

9. (Original) The conjugate of claim 8, wherein said homing molecule selectively binds denatured collagen IV in preference to native collagen IV.

10. (Original) The conjugate of claim 8, wherein said homing molecule selectively binds the alpha 2 chain of collagen IV.

11. (Original) The conjugate of claim 5, wherein said homing molecule is not an antibody or antigen-binding fragment thereof.

12. (Original) The conjugate of claim 5, wherein said homing molecule is a peptide or peptidomimetic.

13. (Original) The conjugate of claim 12, wherein the peptide or peptidomimetic portion of said conjugate has a length of at most 200 residues.

14. (Original) The conjugate of claim 13, wherein the peptide or peptidomimetic portion of said conjugate has a length of at most 50 residues.

15. (Original) The conjugate of claim 12, wherein said homing molecule comprises the amino acid sequence CREKA (SEQ ID NO: 1) or a conservative variant or peptidomimetic thereof.

16. (Original) The conjugate of claim 15, wherein said homing molecule comprises the amino acid sequence CREKA (SEQ ID NO: 1), or a peptidomimetic thereof.

17. (Original) The conjugate of claim 16, wherein said homing molecule comprises the amino acid sequence CREKA (SEQ ID NO: 1).

18. (Original) The conjugate of claim 5, 12, 15, 16, or 17, wherein said therapeutic agent is a cancer chemotherapeutic agent.

19. (Original) The conjugate of claim 5, 12, 15, 16, or 17, wherein said therapeutic agent is a cytotoxic agent.

20. (Original) The conjugate of claim 5, 12, 15, 16, or 17, wherein said therapeutic agent is an anti-angiogenic agent.

21. (Original) The conjugate of claim 5, 12, 15, 16, or 17, wherein said therapeutic agent is a polypeptide.

22. (Original) The conjugate of claim 5, 12, 15, 16, or 17, wherein said therapeutic agent is a nucleic acid molecule.

23. (Original) The conjugate of claim 5, 12, 15, 16, or 17, wherein said therapeutic agent is a small molecule.

24. (Original) The conjugate of claim 5, 12, 15, 16, or 17, which comprises a virus.

25. (Original) The conjugate of claim 24, which comprises a phage.

26. (Original) The conjugate of claim 5, comprising at least two homing molecules that each selectively homes to tumor vasculature and selectively binds collagen.

27. (Original) The conjugate of claim 26, wherein said at least two homing molecules each independently comprises the amino acid sequence CREKA (SEQ ID NO: 1) or a conservative variant or peptidomimetic thereof.

28. (Original) The conjugate of claim 5, comprising at least ten homing molecules that each selectively homes to tumor vasculature and selectively binds collagen.

29. (Original) The conjugate of claim 28, wherein said at least ten homing molecules each independently comprises the amino acid sequence CREKA (SEQ ID NO: 1) or a conservative variant or peptidomimetic thereof.

30. (Original) The conjugate of claim 5, comprising at least 100 homing molecules that each selectively homes to tumor vasculature and selectively binds collagen.

31. (Original) The conjugate of claim 30, wherein said at least 100 homing molecules each independently comprises the amino acid sequence CREKA (SEQ ID NO: 1) or a conservative variant or peptidomimetic thereof.

32. (Original) The conjugate of claim 30 or 31, which comprises a virus.

33. (Original) The conjugate of claim 32, wherein said virus is a phage.

34. (Original) A method of directing a moiety to tumor vasculature in a subject, comprising administering to the subject a conjugate which comprises said moiety linked to a homing molecule that selectively homes to tumor vasculature and selectively binds to collagen,

thereby directing said moiety to tumor vasculature.

35. (Original) The method of claim 34, wherein said homing molecule selectively binds non-helical collagen.

36. (Original) The conjugate of claim 34, wherein said homing molecule selectively homes to breast tumor vasculature.

37. (Original) The conjugate of claim 34, wherein said homing molecule selectively binds collagen IV.

38. (Original) The conjugate of claim 37, wherein said homing molecule selectively binds denatured collagen IV in preference to native collagen IV.

39. (Original) The conjugate of claim 37, wherein said homing molecule selectively binds the alpha 2 chain of collagen IV.

40. (Original) The method of claim 34, wherein said homing molecule is not an antibody or antigen-binding fragment thereof.

41. (Original) The method of claim 34, wherein said homing molecule is a peptide or peptidomimetic.

42. (Original) The method of claim 34, wherein said homing molecule comprises the amino acid sequence CREKA (SEQ ID NO: 1) or a conservative variant or peptidomimetic thereof.

43. (Original) The method of claim 34, wherein said homing molecule comprises the amino acid sequence CREKA (SEQ ID NO: 1), or a peptidomimetic thereof.

44. (Original) The method of claim 43, wherein said homing molecule comprises the amino acid sequence CREKA (SEQ ID NO: 1).

45. (Original) The method of claim 34, wherein said moiety is a therapeutic agent.

46. (Original) The method of claim 45, wherein said therapeutic agent is a cancer chemotherapeutic agent.

47. (Original) The method of claim 45, wherein said therapeutic agent is a cytotoxic agent.

48. (Original) The method of claim 45, wherein said therapeutic agent is an anti-angiogenic agent.

49. (Original) The method of claim 45, wherein said therapeutic agent is a polypeptide.

50. (Original) The method of claim 45, wherein said therapeutic agent is a nucleic acid molecule.

51. (Original) The method of claim 45, wherein said therapeutic agent is a small molecule.

52. (Original) The method of claim 45, wherein said moiety is a detectable agent.

53. (Original) The method of claim 52, wherein said detectable agent is selected from the group consisting of fluorescein and rhodamine.

54. (Original) The method of claim 45, wherein said moiety is a virus.

55. (Original) The method of claim 54, wherein said moiety is a phage.

56. (Original) A method of imaging tumor vasculature in a subject, comprising

(a) administering to the subject a conjugate comprising a detectable agent linked to a homing molecule that selectively homes to tumor vasculature and selectively binds collagen; and

(b) detecting said conjugate, thereby imaging said tumor vasculature.

57. (Original) The method of claim 56, wherein said homing molecule selectively binds non-helical collagen.

58. (Original) The method of claim 56, wherein said tumor vasculature is breast tumor vasculature.

59. (Original) The method of claim 56, wherein said homing molecule is not an antibody or antigen-binding fragment thereof.

60. (Original) The method of claim 56, wherein said homing molecule is a peptide or peptidomimetic.

61. (Original) The method of claim 60, wherein said homing molecule comprises the amino acid sequence CREKA (SEQ ID NO: 1) or a conservative variant or peptidomimetic thereof.

62. (Original) The method of claim 61, wherein said homing molecule comprises the amino acid sequence CREKA (SEQ ID NO: 1) or a peptidomimetic thereof.

63. (Original) The method of claim 62, wherein said homing molecule comprises the amino acid sequence CREKA (SEQ ID NO: 1) .

64. (Original) The method of claim 56, wherein said detectable agent is a radionuclide.

65. (Original) The method of claim 64, wherein said radionuclide is selected from the group consisting of indium-111, technetium-99, carbon-11, and carbon-13.

66. (Original) The method of claim 56, wherein said detectable agent is a fluorophore.

67. (Original) The method of claim 66, wherein said fluorophore is selected from the group consisting of fluorescein and rhodamine.

68. (Original) A method of reducing the number of tumor vessels in a subject, comprising administering to the subject a conjugate which comprises a therapeutic agent linked to a homing molecule that selectively homes to tumor vasculature and selectively binds collagen,

thereby reducing the number of tumor vessels in said subject.

69. (Original) The method of claim 68, wherein said homing molecule selectively binds non-helical collagen.

70. (Original) The method of claim 68, wherein said tumor vessels are breast tumor vessels.

71. (Original) The method of claim 68, wherein said homing molecule is not an antibody or antigen-binding fragment thereof.

72. (Original) The method of claim 68, wherein said homing molecule is a peptide or peptidomimetic.

73. (Original) The method of claim 68, wherein said homing molecule comprises the amino acid sequence CREKA (SEQ ID NO: 1) or a conservative variant or peptidomimetic thereof.

74. (Original) The method of claim 73, wherein said homing molecule comprises the amino acid sequence CREKA (SEQ ID NO: 1).

75. (Original) The method of claim 68, wherein said therapeutic agent is a cancer chemotherapeutic agent.

76. (Original) The method of claim 68, wherein said therapeutic agent is a cytotoxic agent.

77. (Original) The method of claim 68, wherein said therapeutic agent is an anti-angiogenic agent.

78. (Original) A method of treating cancer in a subject, comprising administering to the subject a conjugate which comprises a therapeutic agent linked to a homing molecule that selectively homes to tumor vasculature and selectively binds to collagen.

79. (Original) The method of claim 78, wherein said homing molecule selectively binds non-helical collagen.

80. (Original) The method of claim 78, wherein said homing molecule selectively binds collagen IV.

81. (Original) The method of claim 80, wherein said homing molecule selectively binds denatured collagen IV in preference to native collagen IV.

82. (Original) The method of claim 80, wherein said homing molecule selectively binds the alpha 2 chain of collagen IV.

83. (Original) The method of claim 78, wherein said homing molecule is not an antibody or antigen-binding fragment thereof.

84. (Original) The method of claim 78, wherein said homing molecule is a peptide or peptidomimetic.

85. (Original) The method of claim 84, wherein the peptide or peptidomimetic portion of said conjugate has a length of at most 200 residues.

86. (Original) The method of claim 85, wherein the peptide or peptidomimetic portion of said conjugate has a length of at most 50 residues.

87. (Original) The method of claim 84, wherein said homing molecule comprises the amino acid sequence CREKA (SEQ ID NO: 1) or a conservative variant or peptidomimetic thereof.

88. (Original) The method of claim 87, wherein said homing molecule comprises the amino acid sequence CREKA (SEQ ID NO: 1), or a peptidomimetic thereof.

89. (Original) The method of claim 88, wherein said homing molecule comprises the amino acid sequence CREKA (SEQ ID NO: 1).

90. (Original) The method of claim 78, wherein said therapeutic agent is a cancer chemotherapeutic agent.

91. (Original) The method of claim 78, wherein said therapeutic agent is a cytotoxic agent.

92. (Original) The method of claim 78, wherein said therapeutic agent is an anti-angiogenic agent.

93. (Original) The method of claim 78, wherein said therapeutic agent is a polypeptide.

94. (Original) The method of claim 78, wherein said therapeutic agent is a nucleic acid molecule.

95. (Original) The method of claim 78, wherein said therapeutic agent is a small molecule.

96. (Original) The method of claim 78, wherein said moiety comprises a virus.

97. (Original) The method of claim 96, wherein said virus is a phage.

98. (Original) The method of claim 78, wherein said cancer is breast cancer.